

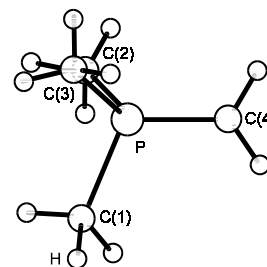
1836  
ED

**C<sub>4</sub>H<sub>11</sub>P**

**Trimethyl(methylene)phosphorane**

**C<sub>3</sub>** (except for the  
methylene H atoms) assumed  
 $\text{H}_2\text{C}=\text{P}(\text{CH}_3)_3$

$r_a$	Å <sup>a)</sup>	$\theta_a$	deg <sup>a)</sup>
P=C(4)	1.610(6)	C(4)=P-C	116.5(6)
P-C(1,2,3)	1.815(3)	P-C(1,2,3)-H	109.3(4)
C(1,2,3)-H	1.099(5)	P=C(4)-H	128 <sup>b)</sup>
C(4)-H	1.060 <sup>b)</sup>	$\varphi_1$ <sup>c)</sup>	17 <sup>d)</sup>
		$\varphi_2$ <sup>e)</sup>	0 <sup>b)</sup>



The nozzle temperature was 74 °C.

<sup>a)</sup> Estimated standard errors including a systematic error.

<sup>b)</sup> Assumed.

<sup>c)</sup> H-C-P=C(4) dihedral angle, defined as zero when one C-H bond of the methyl group is *anti* to the P=C(4) bond.

<sup>d)</sup> Determined by *R*-factor optimization.

<sup>e)</sup> H=C(4)-P-C(1) dihedral angle, defined as zero when CH<sub>2</sub> plane contains the P-C(1) bond.

Ebsworth, E.A.V., Fraser, T.E., Rankin, D.W.H.: Chem. Ber. **110** (1977) 3494.